

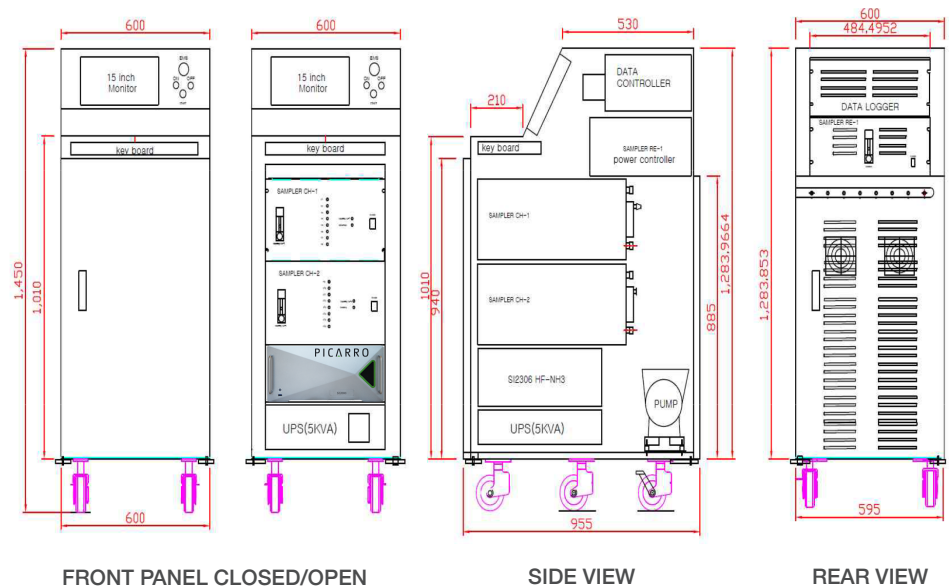
# AMC Portable Leak Detection System

For HF, HCl, NH<sub>3</sub> and H<sub>2</sub>S analyzers

# PICARRO

- Simultaneous, continuous flush sequencer module provides very fast sample point scanning cycles
- Optimized performance for Picarro SI2000 analyzers
- Fully user-programmable leak search mode
- Configurable for 8 or 16 sample ports
- 1 hour backup Uninterruptible Power Supply
- Recovery from PPM level leak events to normal cleanroom levels in just minutes

The **Picarro AMC Portable Leak Detection System** utilizes one or two 8-port sequencer modules to mobilize Picarro gas analyzers for fast detection and confirmation of contamination events. The Portable System has been designed to optimize response time in the presence of reactive gases with the lowest memory retention in the valves, connectors, sample lines and sequencer components. The Sample Sequencer Module utilizes a mass flow controller and a fast flow, high volume vacuum pump to quickly draw samples up to 50 meters away. Our robust and reliable components assure the best performing AMC Leak Detection System with our Picarro SI2000 Series analyzers.



*Continuously monitor up to 16 sampling points for real-time airborne molecular contamination event confirmation!*

## Picarro Sample System Status Screen

**PICARRO** 2018-01-05 14:26:27

Instrument	Date / Time	Model [SI2108]				Model [SI2306]				Model [SI2307]		
		Hcf	H <sub>2</sub> O	Temp	Press	HF	NH <sub>3</sub>	H <sub>2</sub> O	Temp	Press	H <sub>2</sub> S	Press
		ppb	ppm	°C	Torr	ppb	ppb	ppm	°C	Torr	ppb	Torr
[CH-1] Port.01-08	14:26:26	0.304	0.409	80.0	140.439	0.042	0.419	0.225	45.0	139.979	0.000	0.000
LINE #01	2018-01-05 14:20:11	0.311	0.399	80.0	139.934	0.042	0.425	0.227	45.0	139.958	0.000	0.000
LINE #02	2018-01-05 14:20:31	0.310	0.386	80.0	139.894	0.043	0.416	0.225	45.0	139.909	0.000	0.000
LINE #03	2018-01-05 14:20:51	0.311	0.403	80.0	140.031	0.043	0.411	0.227	45.0	140.060	0.000	0.000
LINE #04	2018-01-05 14:21:11	0.309	0.403	80.0	140.004	0.042	0.42					
LINE #05	2018-01-05 14:21:31	0.312	0.400	80.0	140.014	0.043	0.40					
LINE #06	2018-01-05 14:21:51	0.313	0.402	80.0	140.002	0.042	0.43					
LINE #07	2018-01-05 14:22:11	0.313	0.403	80.0	139.975	0.042	0.40					
LINE #08	2018-01-05 14:22:31	0.312	0.400	80.0	139.994	0.042	0.40					
[CH-2] Port.09-16	2018-01-05 14:23:11	0.314	0.403	80.0	139.995	0.042	0.43					
LINE #09	2018-01-05 14:23:51	0.312	0.401	80.0	139.886	0.042	0.43					
LINE #10	2018-01-05 14:24:11	0.311	0.403	80.0	139.980	0.042	0.42					
LINE #11	2018-01-05 14:24:31	0.308	0.405	80.0	139.984	0.042	0.42					
LINE #12	2018-01-05 14:24:51	0.307	0.400	80.0	140.017	0.041	0.43					
LINE #13	2018-01-05 14:25:11	0.309	0.405	80.0	140.011	0.041	0.44					
LINE #14	2018-01-05 14:25:31	0.308	0.402	80.0	139.938	0.041	0.43					
LINE #15	2018-01-05 14:25:51	0.310	0.401	80.0	140.020	0.042	0.42					
LINE #16	2018-01-05 14:26:11	0.307	0.403	80.0	140.000	0.042	0.422					

Flow control panels for [CH-1] Port01 ~ 08 and [CH-2] Port09 ~ 16 are shown at the bottom left. The PLC Program - Set Up window on the right shows a Leak Search Schedule for 14 ports, with a grid for Start, Active, Sampling time, and Waiting time.

### AMC Leak Detection and Monitoring System Software

User-selectable default and customizable programs are available for setting multiple sample point scanning and search modes. Default sample point cycle times are recommended at approximately 30 seconds each but the Sequencer Module can be set to scan through each 8-port module at two to three times this rate or faster, if required. User-programmed scenarios can also be programmed to optimize the locations of leak events, or for monitoring the leak size over time (from low level PPT concentrations into the PPB levels), and for monitoring the potential leaks over as many as 16 sample points simultaneously. Both automatic and manual modes are available for leak search schemes. Preventive maintenance cleaning cycles can be programmed on a periodic basis and System Status screens will easily indicate each sample point composition and unique pressure & temperature readings. With the high flow, continuous flush design of each Sequencer module and proper annual sample line maintenance, frequent or excessive flushing of long distance sample lines should never be necessary - even after a significantly high concentration gas leak event in the PPM concentration levels.

A0316 Sample System Specification		
Model Numbers	A0316-08	A0316-16
Power Consumption	300 W	500 W
Power Requirements	100-110 V, 220-240 V, 50/60 Hz	
Uninterruptable Power Supply	5kVA Supplied, 1 hour backup	
Sampling Line	3/8" PFA	
Dimensions	23.6" W x 37.6" D x 57" H (60 x 95.5 x 145 cm)	
Weight	396 lbs. (181 kg)	
Sample Pump Max. Flow Rate	60 liter/min	
Operating Conditions	5-40°C	
Ambient Humidity	<99% RH non-condensing	